

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

NELLIS *et al.*

Appl. No. *To Be Assigned (Divisional of
Appl. No. 09/852,093; Filed: May 10, 2001)*

Filed: *Herewith*

For: **System and Computer Program
Product for Measuring Unit
Activity of an Enzyme (as
amended)**

Confirmation No. *To Be Assigned*

Art Unit: *To Be Assigned*

Examiner: *To Be Assigned*

Atty. Docket: 0942.5110001

Information Disclosure Statement

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

Listed on accompanying Form PTO-1449 are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.56, 1.97 and 1.98.

Applicants have listed publication dates on the attached PTO-1449 based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicants reserve the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

This statement should not be construed as a representation that a search has been made, or that information more material to the examination of the present patent application does not exist. The Examiner is specifically requested not to rely solely on the material submitted herewith.

Applicants have checked the appropriate boxes below.

- ☐ 1. Statement under 37 C.F.R. 1.704(d). Each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in 37 C.F.R. § 1.56(c) more than thirty days prior to the filing of this information disclosure statement.
- ☒ 2. Filing under 37 C.F.R. § 1.97(b). This Information Disclosure Statement is being filed within three months of the date of filing of a national application other than a continued prosecution application (CPA), OR within three months of the date of entry of the national stage as set forth in 37 C.F.R. § 1.491 in an international application, OR before the mailing date of a first Office Action on the merits OR before the mailing of a first Office Action after the filing of a request for continued examination under 37 C.F.R. § 1.114. No statement or fee is required.
- ☐ 3. Filing under 37 C.F.R. § 1.97(c). This Information Disclosure Statement is being filed more than three months after the U.S. filing date AND after the mailing date of the first Office Action on the merits, but before the mailing date of a Final Rejection, or Notice of Allowance, or an action that otherwise closes prosecution in the application.
 - ☐ a. Statement under 37 C.F.R. § 1.97(e)(1). I hereby state that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to

the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(1).

- ☐ b. Statement under 37 C.F.R. § 1.97(e)(2). I hereby state that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(2).
- ☐ c. Attached is our PTO-2038 Credit Card Payment Form [OR] Check No. _____ in the amount of \$ _____ in payment of the fee under 37 C.F.R. § 1.17(p).
- ☐ 4. Filing under 37 C.F.R. § 1.97(d) This Information Disclosure Statement is being filed more than three months after the U.S. filing date and after the mailing date of a Final Rejection or Notice of Allowance, but before payment of the Issue Fee. Enclosed find our Check No. _____ in the amount of \$ _____ in payment of the fee under 37 C.F.R. § 1.17(p); in addition:
 - ☐ a. Statement under 37 C.F.R. § 1.97(e)(1). I hereby state that each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(1).
 - ☐ b. Statement under 37 C.F.R. § 1.97(e)(2). I hereby state that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(2).

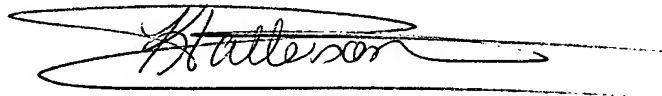
- ☐ 5. The document(s) was/were cited in a search report by a foreign patent office in a counterpart foreign application. Submission of an English language version of the search report that indicates the degree of relevance found by the foreign office is provided in satisfaction of the requirement for a concise explanation of relevance. 1138 OG 37, 38.
- ☐ 6. A concise explanation of the relevance of the non-English language document(s) appears below:
- ☒ 7. Copies of the documents were cited by or submitted to the Office in an IDS that complies with 37 C.F.R. § 1.98(a)-(c) in Application No. 09/852,093, filed May 10, 2001, which is relied upon for an earlier filing date under 35 U.S.C. § 120. Thus, copies of these documents are not attached. 37 C.F.R. § 1.98(d).

It is respectfully requested that the Examiner initial and return a copy of the enclosed PTO-1449, and indicate in the official file wrapper of this patent application that the documents have been considered.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Kendrick P. Patterson
Attorney for Applicants
Registration No. 45,321

Date: July 17, 2023

1100 New York Avenue, N.W.
Washington, D.C. 20005-3934
(202) 371-2600

FORM PTO-1449

INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.
0942.5110001APPLICATION NO.
*To Be Assigned (Divisional of Appl. No.
09/852,093; Filed: May 10, 2001)*APPLICANT
NELLIS *et al.*FILING DATE
*Herewith*GROUP
To Be Assigned

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA1	6,131,072	10/2000	Holden <i>et al.</i>			
	AB1						
	AC1						
	AD1						
	AE1						
	AF1						
	AG1						
	AH1						
	AI1						
	AJ1						
	AK1						

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL1						Yes No
	AM1						Yes No
	AN1						Yes No
	AO1						Yes No
	AP1						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	1	Aultman, Kathryn S. <i>et al.</i> , "Partial P ₁ Nuclease Digestion as a Probe of tRNA Structure," Eur. J. Biochem., 124: 471-476, Louisiana State University (1982).
	AS	1	Coleman, Hugh W. <i>et al.</i> , "Experimentation and Uncertainty Analysis for Engineers: Second Edition," John Wiley & Sons., Inc., 1999, pp. 34-37, 162-164 and 189-191.
	AT	1	Conlan, L.H. <i>et al.</i> , "Modulating Restriction Endonuclease Activities and Specificities Using Neutral Detergents," Biotechniques, Vol. 27, No. 5, 1999, http://www.ncbi.nlm.nih.gov (2 pages).

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449 INFORMATION DISCLOSURE STATEMENT	ATTY. DOCKET NO. 0942.5110001	APPLICATION NO. To Be Assigned (Divisional of Appl. No. 09/852,093; Filed: May 10, 2001)
	APPLICANT NELLIS <i>et al.</i>	
	FILING DATE Herewith	GROUP To Be Assigned

U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA2						
	AB2						
	AC2						
	AD2						
	AE2						
	AF2						
	AG2						
	AH2						
	AI2						
	AJ2						
	AK2						

FOREIGN PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL2						Yes No
	AM2						Yes No
	AN2						Yes No
	AO2						Yes No
	AP2						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	2	Hensley, P. <i>et al.</i> , "The Time-Resolved Kinetics of Superhelical DNA Cleavage by B Restriction Endonuclease," Journal of Biological Chemistry, Vol. 265, No. 25, September 5, 1990, http://www.ncbi.nlm.nih.gov (2 pages).
	AS	2	Hinsch, B. <i>et al.</i> , "Reaction Kinetics of Some Important Site-Specific Endonuclease," Nucleic Acids Res., Vol. 9, No. 13, July 10, 1981, http://www.ncbi.nlm.nih.gov (1 page).
	AT	2	Jeltsch, A. <i>et al.</i> , "Kinetic Characterization of Linear Diffusion of the Restriction Endonuclease EcoRV on DNA," Biochemistry, Vol. 37, No. 8, February 1998, HealthGate® Data Corp., 1999, http://www.healthgate.com/cgi-bin/q-format.cgi (2 pages).

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449

INFORMATION DISCLOSURE STATEMENTATTY. DOCKET NO.
0942.5110001APPLICATION NO.
*To Be Assigned (Divisional of Appl. No.
09/852,093; Filed: May 10, 2001)*APPLICANT
NELLIS *et al.*FILING DATE
*Herewith*GROUP
To Be Assigned

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA3						
	AB3						
	AC3						
	AD3						
	AE3						
	AF3						
	AG3						
	AH3						
	AI3						
	AJ3						
	AK3						

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL3						Yes No
	AM3						Yes No
	AN3						Yes No
	AO3						Yes No
	AP3						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	3	Kandzia, Romy <i>et al.</i> , "Purification and characterization of lanatoside 15'-O-acetyesterase from <i>Digitalis lanate</i> Ehrh.," <i>Planta</i> , 204: 383-389 (1998).
	AS	3	Karlovsy, P., "Calculation of Individual Cleavage Rates from Partial Digests in Restriction Endonuclease Kinetics," <i>Journal of Theoretical Biology</i> , Vol. 132, No. 1, May 7 1998, http://www.ncbi.nlm.nih.gov (1 page).
	AT	3	Kettling, Ulrich <i>et al.</i> , "Real-Time Enzyme Kinetics Monitored by Dual-Color Fluorescence Cross-Correlation Spectroscopy," <i>Biochemistry</i> , Vol. 95, Issue 4, February 17, 1998, pp. 1416-1420, http://www.pnas.org/cgi/content/full (12 pages).

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449

INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.
0942.5110001APPLICATION NO.
To Be Assigned (Divisional of Appl. No.
09/852,093; Filed: May 10, 2001)APPLICANT
NELLIS *et al.*FILING DATE
*Herewith*GROUP
To Be Assigned

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA4						
	AB4						
	AC4						
	AD4						
	AE4						
	AF4						
	AG4						
	AH4						
	AI4						
	AJ4						
	AK4						

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL4						Yes No
	AM4						Yes No
	AN4						Yes No
	AO4						Yes No
	AP4						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	<u>4</u>	Kettling, Ulrich <i>et al.</i> , "Real-time Enzyme Kinetics Monitored by Dual-Color Fluorescence Cross-Correlation Spectroscopy," Biochemistry, Vol. 95, Issue 4, February 17, 1998, http://www.pnas.org/cgi/content/abstracts , The National Academy of Sciences, 1998 (2 pages).
	AS	<u>4</u>	Kettling, Ulrich <i>et al.</i> , "Real-time enzyme kinetics monitored by dual-color fluorescence cross-correlation spectroscopy," The National Academy of Sciences, 1998, Vol. 95, February 1998, pp. 1416-1420.
	AT	<u>4</u>	Kolterman, Andre <i>et al.</i> , "Rapid Assay Processing by Integration of Dual-color Fluorescence Cross-Correlation Spectroscopy: High Throughput Screening for Enzyme Activity," Biochemistry, Vol. 95, Issue 4, February 17, 1998, http://www.pnas.org/cgi/content/abstract , The National Academy of Sciences, 1998 (2 pages).

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449

INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.
0942.5110001APPLICATION NO.
*To Be Assigned (Divisional of Appl. No.
09/852,093; Filed: May 10, 2001)*APPLICANT
NELLIS *et al.*FILING DATE
*Herewith*GROUP
To Be Assigned

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA5						
	AB5						
	AC5						
	AD5						
	AE5						
	AF5						
	AG5						
	AH5						
	AI5						
	AJ5						
	AK5						

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL5						Yes No
	AM5						Yes No
	AN5						Yes No
	AO5						Yes No
	AP5						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	<u>5</u>	Press, William H. <i>et al.</i> , "Numerical Recipes in C: The Art of Scientific Computing," Second Edition, Cambridge University Press, 1988-1992, Chapter 10, pp. 394-455.
	AS	<u>5</u>	Press, William H. <i>et al.</i> , "Numerical Recipes in C: The Art of Scientific Computing," Second Edition, Cambridge University Press, 1988-1992, Chapter 15, pp. 656-706.
	AT	<u>5</u>	Koltermann, Andre <i>et al.</i> , "Rapid assay processing by integration of dual-color fluorescence cross-correlation spectroscopy: High throughput screening for enzyme activity," The National Academy of Sciences, 1998, Vol. 95, February 1998, pp. 1421-1426.

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449

INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.
0942.5110001APPLICATION NO.
*To Be Assigned (Divisional of Appl. No.
09/852,093; Filed: May 10, 2001)*APPLICANT
NELLIS *et al.*FILING DATE
*Herewith*GROUP
To Be Assigned

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA6						
	AB6						
	AC6						
	AD6						
	AE6						
	AF6						
	AG6						
	AH6						
	AI6						
	AJ6						
	AK6						

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL6						Yes No
	AM6						Yes No
	AN6						Yes No
	AO6						Yes No
	AP6						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	6	Wright, David J. <i>et al.</i> , "The Kinetic Mechanism of EcoRI Endonuclease," Journal of Biological Chemistry, Vol. 274, No. 45, November 5, 1999, pp. 31896-31902, http://www.jbc.org/cgi/content/full/274/45/31896 (17 pages).
	AS	6	Wright, David J. <i>et al.</i> , "The Kinetic Mechanism of EcoRI Endonuclease," The Journal of Biological Chemistry, The American Society for Biochemistry and Molecular Biology, Inc., 1999, Vol. 274, No. 45, November 5, 1999, pp. 31896-31902.
	AT	6	

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.